

Serial No. 09/898,486

Reply Dated: March 1, 2005

Reply to Office Action Mailed – December 1, 2004

Attorney Docket No. 3036/50059

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 2 to include labels.

Attachment: Replacement Sheet

REMARKS

In response to the objection to the drawings, Applicants have submitted corrected drawing sheets, as required. In particular, the corrected drawing sheets include labels on the boxes referred to at page 3 of the Office Action.

In addition, in response to the objection to the specification, the title of the invention has been changed to "Improvements in Packet Switches" as suggested by the Examiner. In addition, appropriate headings have been inserted, and grammatical and spelling revisions have been made to accord with U.S. language usage. Accordingly, reconsideration and withdrawal of these grounds of objection are respectfully requested.

Claims 1-3 have been rejected under 35 U.S.C. §102(b) as anticipated by Bernstein et al (U.S. Patent No. 5,999,529). However, for the reasons set forth hereinafter, Applicants respectfully submit that all claims which remain of record in this application, including new Claims 4 through 9, distinguish over Bernstein et al, whether considered by itself or in combination with other references.

The present invention is directed to a packet switching device of the type which is used to transfer information via the Internet in accordance with a standard protocol known as the Internet Protocol. Such packet switches accept incoming packets, temporarily store them, and forward them to another part of

the network. For this purpose, the switching device according to the invention includes a plurality of ingress line interface cards (LICs), a plurality of egress LICs, a backplane and a controller. Transmission of signals from the ingress LICs to the controller, and from the controller to each of the ingress and egress LICs takes place via the backplane itself.

For the transmission of message information across the backplane between ingress and egress LICs, each ingress LIC includes a slicing means for slicing units of message data into "slices" for transfer across the backplane, and each egress LIC has associated "de-slicing" means for re-forming the slices into cells. The controller controls the propagation of slices across the backplane, from the ingress LICs to the egress LICs. For the purpose, each ingress LIC is assigned a dedicated timeslot in which it can send control information to the controller via the backplane. A similar system is used for transmission of communications from the controller to the LICs. The dedicated timeslots for the respective LICs do not overlap.

By the foregoing arrangement, it is possible to eliminate the need for additional dedicated communications paths between the LICs (that is, both the ingress and egress LICs) and the controller. Rather, control information is transmitted back and forth between the ingress and egress LICs and the controller in dedicated timeslots, via the backplane itself. These features of the invention are recited in independent Claims 1 and 6.

The Bernstein et al reference, on the other hand does not teach or suggest such a system. In particular Bernstein et al does not include a plurality of ingress means and a plurality of egress means as recited in both Claim 1 and Claim 6. Rather, the elements 210 and 220 of the Bernstein et al apparatus constitute a single ingress means and a single egress means, respectively.

In addition, there is no mention in Bernstein et al of a control means adapted to control a backplane in accordance with control slices which are interleaved with slices of user data and predetermined timeslots. In particular, there is no mention in either Column 4, lines 25-31, or in Column 5, lines 16-34, that control data are or could be interspersed with user data within the train of synchronous slices, as illustrated, for example, in Figure 3 of the present application, and as recited in independent Claims 1 and 6. Rather, the cited paragraphs indicate that in the Bernstein et al system, dedicated control circuitry is provided for the transmission of controlled data. As noted previously, the arrangement according to the invention, as recited in Claims 1 and 6 eliminates the need for such separate transmission paths for routing control data between the ingress/egress units and the controller. (See Page 5, lines 1-2 of the specification.)

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If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #3036/50059).

Respectfully submitted,



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Attachments - Replacement Sheet – Figure 2
- Amended Abstract of the Disclosure